

water quality management program

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March 5, 1980

Mr. Donald G. Myer, P.E. Director Office of Environmental Health Phoenix Area Indian Health Service 801 East Indian School Road Phoenix, Arizona 85014

Dear Mr. Myer:

Enclosed is one copy of the supplementary chemical analyses conducted on the three gravel processing wells in the vicinity of the Tri-City Landfill. This is the additional sampling results referenced on page 8 of the "Groundwater Conditions Near the Tri-Cities Landfill" Report prepared by MAG.

If you have any questions or comments, please do not hesitate to call me.

R Frank

Sincerely,

Mark R. Frank

208 Program Coordinator

MRF:ab enclosure

cc: Lynn Wallace
Barry Abbott
Fred Hoffman
Tim Bray
Charles Luster
Dean Sloan
Grover Serenbetz



APPENDIX A SUPPLEMENTARY CHEMICAL ANALYSES

Table 3 contains the results of chemical analyses of water from the three wells used for gravel processing. In general these wells are shallower than the Salt River Project wells to the south and east. However, the chemical quality of water from the gravel processing wells appears to be similar to that of water from the deeper wells. Salinity and nitrate contents are slightly higher in the shallower groundwater. Analyses for trace elements indicate generally low levels. Arsenic contents were all less than 0.01 mg/l. There is no indication of leachate contamination of groundwater in the vicinity of the landfill, based on data from existing wells.

TABLE 3 - CHEMICAL ANALYSES OF WATER FROM INDUSTRIAL WELLS NEAR TRI-CITIES LANDFILL

Constituent (mg/l)	(A-1-5) 3 acc	(A-1-5) 4 dad	(A-2-5) 34 ccb
Calcium Magnesium Sodium Potassium Carbonate Bicarbonate Sulfate Chloride Nitrate Fluoride Iron Manganese Arsenic Zinc Cadmium Chromium Lead Boron pH	62 18 190 4 0 243 60 257 22 0.26 <0.05 <0.01 <0.01 <0.02 0.02 0.02 <0.01 <0.01 7.4	45 17 188 4 0 262 63 205 17 0.29 <0.05 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.02 7.6	51 20 203 4 0 204 64 284 18 0.33 <0.05 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.02 7.7
Electrical Conductivity (micromhos/cm @ 25 ^O C) Total Dissolved Solids	1,050 707	940 673	1,100 710
Temperature (OF)	71	72	74
Date	1/11/80	1/17/80	1/17/80
Perforated Interval (feet)	-	T.D. 355	200-350